

Crediting Legumes in the National School Lunch Program and School Breakfast Program

This guidance applies to the U.S. Department of Agriculture's (USDA) meal patterns for grades K-12 and preschoolers (ages 1-4) in the National School Lunch Program (NSLP), School Breakfast Program (SBP), Seamless Summer Option (SSO) of the NSLP, and Afterschool Snack Program (ASP) of the NSLP. For information on the meal patterns and crediting foods for grades K-12, visit the Connecticut State Department of Education's (CSDE) [Meal Patterns for Grades K-12 in School Nutrition Programs](#) and [Crediting Foods in School Nutrition Programs](#) webpages. For information on the meal patterns and crediting foods for preschoolers, visit the CSDE's [Meal Patterns for Preschoolers in School Nutrition Programs](#) webpage.



Legumes include cooked dry beans and peas, such as black beans, black-eyed peas (mature, dry), edamame (soybeans), garbanzo beans (chickpeas), kidney beans, lentils, navy beans, soybeans, split peas, and white beans. Legumes may credit as either the meat/meat alternates component or the vegetables component, but one serving cannot credit as both components in the same meal or snack. Menu planners must determine in advance how to credit legumes in a meal. A $\frac{1}{4}$ -cup serving of legumes credits as 1 ounce of the meat/meat alternates component or $\frac{1}{4}$ cup of the vegetables component.

Legumes may credit as either component in different meals. For example, lentils may credit as the vegetables component at one lunch, and as the meat/meat alternates component at another lunch. If the meal includes two servings of legumes, the menu planner may choose to credit one serving as the vegetables component and one serving as the meat/meat alternates component. For example, $\frac{1}{4}$ cup of garbanzo beans in a salad may credit as $\frac{1}{4}$ cup of the vegetables component and $\frac{1}{2}$ cup of kidney beans in chili may credit as 2 ounces of the meat/meat alternates component.

Crediting Legumes as Vegetables

Foods in the vegetables component credit based on volume (cups). For example, a $\frac{1}{2}$ -cup serving (8 tablespoons) of legumes credits as $\frac{1}{2}$ cup of the vegetables component. The minimum creditable amount for the vegetables component is $\frac{1}{8}$ cup (2 tablespoons). The serving refers to the amount of legumes without added ingredients. For example, to credit as $\frac{1}{2}$ cup of legumes, a serving of baked beans must contain $\frac{1}{2}$ cup of beans, excluding added ingredients such as sauce and pork fat.



Crediting Legumes in the NSLP and SBP

The menu planner must round down the amount of legumes to the nearest $\frac{1}{8}$ cup (2 tablespoons). For example, a recipe with $2\frac{1}{2}$ tablespoons of kidney beans per serving credits as $\frac{1}{8}$ cup of the vegetables component. If the menu item contains less than the full serving of the vegetables component, the meal must include additional vegetables to provide the full serving for each grade group.

Vegetable subgroups for grades K-12 at lunch

The lunch meal pattern for grades K-12 requires weekly amounts of five vegetable subgroups, including legumes. Vegetables offered in amounts less than $\frac{1}{8}$ cup do not count toward the lunch menu's daily and weekly vegetable offerings, but must count toward the weekly dietary specifications. For information on the dietary specifications, refer to section 6 of the CSDE's [Menu Planning Guide for School Meals for Grades K-12](#), and the "Dietary Specifications (Nutrition Standards for School Meals)" section of the CSDE's [Meal Patterns for Grades K-12 in School Nutrition Programs](#) webpage. For information on the vegetable subgroups, refer to the CSDE's resource, [Vegetable Subgroups in the NSLP](#).

The preschool meal patterns do not require dietary specifications or vegetable subgroups. However, the USDA's [CACFP Best Practices](#) recommends that preschool menus include at least one weekly serving of each vegetable subgroup. For more information, refer to the CSDE's resource, [Vegetable Subgroups in the CACFP](#).

Crediting Legumes as Meat/Meat Alternates

Quantities for the meat/meat alternates component are indicated as ounce equivalents in the NSLP meal pattern for grades K-12; and as ounces in the ASP meal pattern for grades K-12, and the NSLP and ASP meal patterns for preschoolers. The amount that credits as 1 ounce equivalent or 1 ounce of meat/meat alternates is the same. This document refers to ounce equivalents for simplicity.

Legumes credit as the meat/meat alternates component based on volume. A $\frac{1}{4}$ -cup serving (4 tablespoons) of legumes credits as 1 ounce equivalent of the meat/meat alternates component. The minimum creditable amount is 1 tablespoon. At lunch, the meat/meat alternates component must be served in a main dish, or in a main dish and one other food item.

The menu planner must round down the amount of legumes to the nearest $\frac{1}{4}$ ounce equivalent. For example, a recipe that contains $2\frac{1}{2}$ tablespoons (0.625 ounce equivalent of meat/meat alternates) of kidney beans per serving rounds down to 0.5 ounce equivalent of the meat/meat alternates component. Table 1 shows the meal pattern contribution for different serving sizes of legumes.

Crediting Legumes in the NSLP and SBP

Table 1. Crediting legumes as the meat/meat alternates component

Serving size	Meal pattern contribution (ounce equivalents)
8 tablespoons ($\frac{1}{2}$ cup)	2
7 tablespoons	$1\frac{3}{4}$
6 tablespoons ($\frac{3}{8}$ cup)	$1\frac{1}{2}$
5 tablespoons	$1\frac{1}{4}$
4 tablespoons ($\frac{1}{4}$ cup)	1
3 tablespoons	$\frac{3}{4}$
2 tablespoons ($\frac{1}{8}$ cup)	$\frac{1}{2}$
1 tablespoon ($\frac{1}{16}$ cup)	$\frac{1}{4}$ (minimum creditable amount)

Roasted or Dried Legumes

Roasted or dried legumes, such as garbanzo beans (chickpeas) and soybeans, may credit as the meat/meat alternates component or the vegetables component, but not both in the same meal or ASP snack.

- **Meat/meat alternates:** Roasted or dried legumes credit as the meat/meat alternates component based on weight (ounces). A 1-ounce serving of roasted or dried legumes credits as 1 ounce equivalent of the meat/meat alternates component. At lunch, roasted or dried legumes cannot credit for more than half of the meat/meat alternates component. They must be combined with another food from the meat/meat alternates component to meet the full requirement.
- **Vegetables:** Roasted or dried legumes credit as the legumes subgroup of the vegetables component based on volume (cups). For example, $\frac{1}{4}$ cup of roasted or dried legumes credits as $\frac{1}{4}$ cup of the vegetables component (legumes subgroup). Menu planners may credit roasted or dried legumes toward the minimum weekly requirement of $\frac{1}{2}$ cup of legumes for grades K-12 at lunch.

The USDA recommends using discretion when offering snack-type legumes (such as individually wrapped soy nuts) as part of reimbursable meals, due to their perception as snack foods. While these types of products credit in school meals, they may be better suited for bagged lunches during meals away from school.

Crediting Legumes in the NSLP and SBP

Children younger than 4 are at the highest risk of choking. Consider children's ages and developmental readiness when deciding whether to offer roasted or dried legumes in preschool menus. This consideration is also important for children whose disability requires dietary restrictions. For additional guidance, visit the "[Choking Prevention](#)" section of the CSDE's [Food Safety for Child Nutrition Programs](#) webpage.



Crediting Legumes in Recipes

Legume-based foods made on site (such as lentil soup, bean burritos, and chili) credit based on volume (cups) of legumes per recipe serving. The crediting information depends on whether the menu planner credits legumes as the vegetables component or the meat/meat alternates component.

- **Vegetables:** The minimum creditable amount of the vegetable component is $\frac{1}{8}$ cup. To determine the number of $\frac{1}{8}$ -cup servings of legumes in one serving of the recipe, divide the cups of legumes in one serving of the recipe by 0.125, then round down to the nearest $\frac{1}{8}$ cup. Table 2 shows an example of how to calculate the vegetables contribution of legumes in a recipe.
- **Meat/meat alternates:** A $\frac{1}{4}$ -cup serving of legumes provides 1 ounce equivalent of the meat/meat alternates component. To determine the ounce equivalents of the meat/meat alternates component in one serving of the recipe, divide the cups of legumes in one serving of the recipe by 0.25, then round down to the nearest $\frac{1}{4}$ ounce equivalent. Table 3 shows an example of how to calculate the meat/meat alternates contribution of legumes in a recipe.

For assistance with recipe calculations, use the equivalent volume measures in the ICN's [Basics at a Glance Portion Control Poster](#) and the decimal fraction equivalents chart (table 6) in the "[Introduction](#)" section of the USDA's *Food Buying Guide for Child Nutrition Programs* (FBG). For information on standardized recipes, visit the "[Crediting Foods Prepared on Site in School Nutrition Programs](#)" or "[Crediting Foods Prepared on Site in Preschool Menus](#)" sections of the CSDE's school nutrition programs webpages.

Crediting Legumes in the NSLP and SBP

Table 2. Determining the vegetables contribution of legumes in a recipe

A recipe provides 50 servings and contains 1 gallon and 1 quart of chickpeas. How many cups of vegetables (legumes subgroup) does the recipe provide per serving?

1. Determine the total cups of legumes in the recipe: Use the ICN's *Basics at a Glance Portion Control Poster* to convert larger measurements to cups. Use the decimal fraction equivalents chart (table 6) in the FBG's "Introduction" section to convert fractions to decimals.

A **20** cups

1 gallon (16 cups) plus 1 quart (4 cups) of chickpeas equals 20 cups of chickpeas.

2. Number of servings in the recipe:

B **50** servings

3. Determine the cups of legumes per serving: Divide the total cups of legumes (A) by the number of servings in the recipe (B).

C **0.4** cups per serving *

20 cups of chickpeas divided by 50 servings equals 0.4 cup of chickpeas per serving.

* **Note:** If the decimal amount for the cups of legumes per serving (C) converts to an **even multiple of 1/8 cup**, such as 0.5 (1/2) cup, 0.25 (1/4) cup, or 0.125 (1/8) cup, this is the final meal pattern contribution for the legumes subgroup of the vegetables component. **Do not complete steps 4 and 5.**

4. Determine the number of 1/8-cup servings (minimum creditable amount) of legumes in one serving of the recipe: Divide the cups of legumes per serving (C) by 0.125.

D **3.2** servings of 1/8 cup

0.4 cup of chickpeas per serving divided by 0.125 equals 3.2 servings of 1/8 cup.

5. Round down the number in D to nearest 1/8-cup serving. 3.2 servings round down to 3 servings of 1/8 cup (or 3/8 cup). One serving of the recipe contains 3/8 cup of the vegetables component.

E **3** servings of 1/8 cup

Meal pattern contribution: 3/8 cup of the legumes subgroup

Crediting Legumes in the NSLP and SBP

Table 3. Determining the meat/meat alternates contribution of legumes in a recipe

A recipe provides 50 servings and contains 1 gallon and 1 quart of chickpeas. How many ounce equivalents of the meat/meat alternates component does the recipe provide per serving?

- Determine the total cups of legumes in the recipe: Use the ICN's *Basics at a Glance Portion Control Poster* to convert larger measurements to cups. Use the decimal fraction equivalents chart (table 6) in the FBG's "Introduction" section to convert fractions to decimals.

1 gallon (16 cups) plus 1 quart (4 cups) of chickpeas equals 20 cups of chickpeas.

A	20 cups
----------	----------------

- Number of servings in the recipe:

B	50 servings
----------	--------------------

- Determine the cups of legumes per serving: Divide the total cups of legumes (A) by the number of servings in the recipe (B).

20 cups of chickpeas divided by 50 servings equals 0.4 cup of chickpeas per serving.

C	0.4 cups per serving
----------	-----------------------------

- Determine the ounce equivalents of meat/meat alternates per serving: Divide the cups of legumes per serving (C) by 0.25 (1 ounce equivalent = $\frac{1}{4}$ cup (0.25) of legumes).

0.4 cups of chickpeas per serving divided by 0.25 equals 1.6 ounce equivalents of meat/meat alternates.

D	1.6 ounce equivalents per serving
----------	--

- Round down the number in D to the nearest $\frac{1}{4}$ ounce equivalent.

1.6 ounce equivalents rounds down to 1.5 ounce equivalents of meat/meat alternates. One serving of the recipe contains 1.5 ounce equivalents of the meat/meat alternates component.

E	1.5 ounce equivalents per serving
----------	--

Meal pattern contribution: 1½ ounce equivalents of the meat/meat alternates component *

Crediting Legumes in the NSLP and SBP

Pasta Products Made of Legume Flours

Pasta products made of legume flours may credit as either the vegetables component or the meat/meat alternates component, but not both in the same meal or ASP snack.

- **Meat/meat alternates:** Crediting pasta products that contain legume flours as the meat/meat alternates component is the same as crediting legumes. A ½-cup serving of cooked pasta made of 100 percent legume flours credits as 2 ounce equivalents of the meat/meat alternates component.

Legume flour pasta must be offered with additional meat/meat alternates, such as tofu, cheese, or meat. The USDA's intent for this requirement is to ensure that meat/meat alternates are in a form that is recognizable to children. The nutrition education aspect of the Child Nutrition Programs includes the goal of helping children recognize the food groups that contribute to healthy meals and snacks.



- **Vegetables:** Pasta products that contain vegetable flours from one vegetable subgroup credit toward that vegetable subgroup. For example, ½ cup of pasta made of 100 percent red lentil flour credits as ½ cup of the legumes subgroup.

Alternatively, manufacturers and SFAs may credit legume flour pasta using the bean flour yield information on page C-1 of [Appendix C](#) of the FBG, or with appropriate documentation on the manufacturer's product formulation statement (PFS). For more information, refer to the CSDE's resources, [Product Formulation Statements](#) and [Accepting Processed Product Documentation in the NSLP and SBP](#), and the USDA's documents, [Product Formulation Statement \(Product Analysis\) for Meat/Meat Alternate \(M/MA\) Products in Child Nutrition Programs](#) and [Tips for Evaluating a Manufacturer's PFS](#).

For additional guidance on documentation for commercial products, visit the CSDE's "[Crediting Commercial Processed Products in School Nutrition Programs](#)" and "[Crediting Commercial Processed Products in Preschool Menus](#)" webpages.



Crediting Legumes in the NSLP and SBP

Resources

Accepting Processed Product Documentation in the NSLP and SBP (CSDE):

<https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/AcceptDocumentationSNP.pdf>

Afterschool Snack Program Handbook (CSDE):

<https://portal.ct.gov/-/media/SDE/Nutrition/ASP/ASPHandbook.pdf>

Appendix C: Food Items for Further Processing, Food Buying Guide for Child Nutrition Programs (USDA):

https://foodbuyingguide.fns.usda.gov/files/Reports/USDA_FBG_FoodItemsForFurtherProcessing_YieldTable.pdf

CACFP Best Practices (USDA):

https://fns-prod.azureedge.net/sites/default/files/cacfp/CACFP_bestpractices.pdf

Choking Prevention (CSDE's Food Safety for Child Nutrition Programs webpage):

<https://portal.ct.gov/SDE/Nutrition/Food-Safety-for-Child-Nutrition-Programs/Documents#ChokingPrevention>

Crediting Foods in School Nutrition Programs (CSDE webpage):

<https://portal.ct.gov/SDE/Nutrition/Crediting-Foods-in-School-Nutrition-Programs>

Crediting Soups in the NSLP and SBP (CSDE):

<https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/CreditSoupSNP.pdf>

Food Buying Guide for Child Nutrition Programs (USDA):

<https://www.fns.usda.gov/tn/food-buying-guide-for-child-nutrition-programs>

Meal Patterns for Grades K-12 in School Nutrition Programs (CSDE webpage):

<https://portal.ct.gov/SDE/Nutrition/Meal-Patterns-School-Nutrition-Programs>

Meal Patterns for Preschoolers in School Nutrition Programs (CSDE webpage):

<https://portal.ct.gov/SDE/Nutrition/Meal-Patterns-Preschoolers-in-School-Nutrition-Programs/Documents>

Meat/Meat Alternates Component for Grades K-12 (CSDE webpage):

<https://portal.ct.gov/SDE/Nutrition/Crediting-Foods-in-School-Nutrition-Programs/Documents#MMA>

Meat/Meat Alternates Component for Grades K-12 in the ASP (CSDE webpage):

<https://portal.ct.gov/SDE/Nutrition/Afterschool-Snack-Program/Documents#MMAK12>

Meat/Meat Alternates Component for Preschoolers (CSDE webpage):

<https://portal.ct.gov/SDE/Nutrition/Meal-Patterns-Preschoolers-in-School-Nutrition-Programs/Related-Resources#MMA>

Crediting Legumes in the NSLP and SBP

Menu Planning for Child Nutrition Programs (CSDE webpage):

<https://portal.ct.gov/SDE/Nutrition/Menu-Planning>

Menu Planning Guide for Preschool Meals (CSDE):

<https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Preschool/MPGpreschool.pdf>

Menu Planning Guide for School Meals for Grades K-12 (CSDE):

<https://portal.ct.gov/SDE/Nutrition/Menu-Planning-Guide-for-School-Meals>

Menu Planning Resources for School Meals (CSDE):

<https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/MealPattern/MenuPlanResourcesSchools.pdf>

Product Formulation Statement (Product Analysis) for Meat/Meat Alternate (M/MA) Products in Child Nutrition Programs (USDA):

https://www.fns.usda.gov/sites/default/files/resource-files/PFS_Meats-Meat_Alternates_Fillable_508.pdf

Product Formulation Statement for Documenting Vegetables and Fruits in the Child and Adult Care Food Program, Summer Food Service Program, and NSLP Afterschool Snacks (USDA):

https://fns-prod.azureedge.net/sites/default/files/resource-files/PFS_Document_Total_Veg_Fruits.pdf

Product Formulation Statement for Documenting Vegetables and Fruits in School Meal Programs (USDA):

https://fns-prod.azureedge.net/sites/default/files/resource-files/PFS_Document_Vegetables_Subgroups_Fruits.pdf

Product Formulation Statement for Documenting Vegetables and Fruits in School Meal Programs – Completed Sample for Vegetables (USDA):

https://fns-prod.azureedge.net/sites/default/files/resource-files/PFS_Veg_Subgroups_Fruits_Fillable_508.pdf

Product Formulation Statements (CSDE):

<https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/PFS.pdf>

Resources for the Preschool Meal Patterns (CSDE):

<https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Preschool/ResourcesPreschoolMealPattern.pdf>

Crediting Legumes in the NSLP and SBP

Reviewer's Checklist for Evaluating Manufacturer Product Formulation Statements for Meat/Meat Alternates (USDA):

https://fns-prod.azureedge.net/sites/default/files/reviewer_checklist.pdf

Standardized Recipe Form for School Nutrition Programs (CSDE):

<https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/StandardizedRecipeSchools.doc>

Tips for Evaluating a Manufacturer's Product Formulation Statement (USDA):

<https://fns-prod.azureedge.net/sites/default/files/resource-files/manufacturerPFStipsheet.pdf>

USDA Memo SP 26-2019, CACFP 13-2019 and SFSP 12-2019: Crediting Pasta Products Made of Vegetable Flour in the Child Nutrition Programs:

<https://www.fns.usda.gov/crediting-pasta-products-made-vegetable-flour-child-nutrition-programs>

Vegetable Subgroups in the NSLP (CSDE):

<https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/VegetableSubgroupsNSLP.pdf>

Vegetables Component for Grades K-12 (CSDE webpage):

<https://portal.ct.gov/SDE/Nutrition/Crediting-Foods-in-School-Nutrition-Programs/Documents#Vegetables>

Vegetables Component for Grades K-12 in the ASP (CSDE webpage):

<https://portal.ct.gov/SDE/Nutrition/Afterschool-Snack-Program/Documents#VegetablesK12>

Vegetables Component for Preschoolers (CSDE webpage):

<https://portal.ct.gov/SDE/Nutrition/Meal-Patterns-Preschoolers-in-School-Nutrition-Programs/Related-Resources#Vegetables>

Crediting Legumes in the NSLP and SBP



For more information, visit the CSDE's [Meal Patterns for Grades K-12 in School Nutrition Programs](#), [Crediting Foods in School Nutrition Programs](#), and [Meal Patterns for Preschoolers in School Nutrition Programs](#) webpages, or contact the [school nutrition programs staff](#) in the CSDE's Bureau of Health/Nutrition, Family Services and Adult Education, 450 Columbus Boulevard, Suite 504, Hartford, CT 06103-1841.

This document is available at <https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/CreditLegumesSNP.pdf>.

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, sex, disability, age, or reprisal or retaliation for prior civil rights activity in any program or activity conducted or funded by USDA.

Persons with disabilities who require alternative means of communication for program information (e.g. Braille, large print, audiotope, American Sign Language, etc.), should contact the Agency (State or local) where they applied for benefits. Individuals who are deaf, hard of hearing or have speech disabilities may contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program complaint of discrimination, complete the [USDA Program Discrimination Complaint Form](#), (AD-3027) found online at: [How to File a Complaint](#), and at any USDA office, or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by:

- (1) mail: U.S. Department of Agriculture
Office of the Assistant Secretary for Civil Rights
1400 Independence Avenue, SW
Washington, D.C. 20250-9410;
- (2) fax: (202) 690-7442; or
- (3) email: program.intake@usda.gov.

This institution is an equal opportunity provider.

The Connecticut State Department of Education is committed to a policy of equal opportunity/affirmative action for all qualified persons. The Connecticut Department of Education does not discriminate in any employment practice, education program, or educational activity on the basis of age, ancestry, color, criminal record (in state employment and licensing), gender identity or expression, genetic information, intellectual disability, learning disability, marital status, mental disability (past or present), national origin, physical disability (including blindness), race, religious creed, retaliation for previously opposed discrimination or coercion, sex (pregnancy or sexual harassment), sexual orientation, veteran status or workplace hazards to reproductive systems, unless there is a bona fide occupational qualification excluding persons in any of the aforementioned protected classes.

Inquiries regarding the Connecticut State Department of Education's nondiscrimination policies should be directed to: Levy Gillespie, Equal Employment Opportunity Director/Americans with Disabilities Coordinator (ADA), Connecticut State Department of Education, 450 Columbus Boulevard, Suite 505, Hartford, CT 06103, 860-807-2071, levy.gillespie@ct.gov.